iab. Interactive Advertising Bureau - Mobile Phone Creative Guidelines

		Creative Unit Name	Initial Dimensions (WxH in pixels)	Maximum Expanded Dimensions (WxH in pixels)	Max Initial File Load Size (KB, MB)	Max Additional Initial File Load Size for OBA Self-Reg Compliance	Subsequent Max Polite File Load Size	Subsequent Max User-Initiated File Load Size	Subsequent Max User-Initiated Additional Streaming File Size	Max Video & Animation Frame rate	Maximum Animation Length	Max Video Length	Audio Initiation	Z-index Range	Max Percentage of CPU Usage (Note 3)	Minimum Required Controls	Labeling Requirements, Font Size, etc.	Submission Lead-Time	Implementation Notes & Best Practice	Supported Creative Types
Image	Feature Phone	Feature Phone Small Banner	120x20	not allowed for this unit	3KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	0 - 4,999	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	not applicable	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, PNG
		Feature Phone Medium Banner	168x28	not allowed for this unit	4KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	0 - 4,999	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	not applicable	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, PNG
		Feature Phone Large Banner	216x36	not allowed for this unit	5KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	0 - 4,999	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	not applicable	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, PNG
	Smart Phone	Smartphone Static Interstitial	300x250 (Increased dimensions allowed for display in high resolution devices. Please see Note 1 below.)	not allowed for this unit	30KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	6,000,000+	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	Control = "Close X"	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, PNG
		Smartphone Static Banner	300x50 (Increased dimensions allowed for display in high resolution devices. Please see Note 1 below.)	not allowed for this unit	15KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	0 - 4,999	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	not applicable	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, PNG
		Smartphone Static Wide Banner	320x50 (Increased dimensions allowed for display in high resolution devices. Please see Note 1 below.)	not allowed for this unit	15KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	not allowed for this unit	not allowed for this unit	not allowed for this unit	not allowed for this unit	15 seconds	not allowed for this unit	not allowed for this unit	0 - 4,999	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	not applicable	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	3 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized, include dimensions in file name	GIF, JPG, , PNG
Rich Media / Expand	Smart Phone	Smartphone Rich Interstitial	300x250 (Increased dimensions allowed for display in high resolution devices. Please see Note 1 below.)	Expansion not allowed for this unit	35KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	best practice	best practice	best practice	24 fps	15 seconds	30 seconds	User Initiated: Tap	6,000,000+	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	Control = "Close X" on expanded panel and "Expand" on collapsed panel Font = 8pt (11px) - 16pt (21px) Retract Feature = Either tap to close/expand Video may be played in native player which has standard controls Custom video players must include: Play, Pause, Mute (volume control to zero (0) output may be included instead of or in addition to Mute control)	Ad unit content must be clearly distinguishable from normal webpage content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	5 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized; include dimensions in file name; use MRAID specifications when appropriate	HTML5 ; JavaScript; Animated GIF
		Smartphone Rich Banner & Expandable	300x50 (Increase dimensions allowed for display in high resolution devices. Please see Note 1 below.)	300x250, Full Screen (Technical restrictions may apply for full screen expansion. Please see Note 2 below.)	35KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	best practice	best practice	best practice	24 fps	15 seconds	30 seconds	User Initiated: Tap	5,000 - 1,999,999 (for entire ad unit)	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	Control = "Close X" on expanded panel and "Expand" on collapsed panel Font = 8pt (11px) - 16pt (21px) Retract Feature = Either tap to close/expand Video may be played in native player which has standard controls Custom video players must include: Play, Pause, Mute (volume control to zero (0) output may be included instead of or in addition to Mute control)	Ad unit content must be clearly distinguishable from normal webpage content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	5 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized; include dimensions in file name; use MRAID specifications when appropriate	HTML5 ; JavaScript; Animated GIF
		Smartphone Rich Wide Banner & Expandable	320x50 (Increased dimensions allowed for display in high resolution devices. Please see Note 1 below.)	320x416, Full Screen (Technical restrictions may apply for full screen expansion. Please see Note 2 below.)	35KB	The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines were not yet established as of the publication of these guidelines. As a result, a specific guidance is not included at this time.	best practice	best practice	best practice	24 fps	15 seconds	30 seconds	User Initiated: Tap	5,000 - 1,999,999 (for entire ad unit)	Changing connectivity speeds and device variability affect how ad display is processed. Please see **Best Practice** tab for more information.	Control = "Close X" on expanded panel and "Expand" on collapsed panel Font = 8pt (11px) - 16pt (21px) Retract Feature = Either tap to close/expand Video may be played in native player which has standard controls Custom video players must include: Play, Pause, Mute (volume control to zero (0) output may be included instead of or in addition to Mute control)	Ad unit content must be clearly distinguishable from normal webpage or application content (i.e. ad unit must have clearly defined borders and not be confused with normal page content)	5 business days (If conflicts are found with the creative the submission lead time may restart upon re-submission. Please check with the publisher for specific lead time requirements.)	Ensure images are mobile web optimized; do not use Flash™ assets; landing pages must be mobile optimized; include dimensions in file name; use MRAID specifications when appropriate	HTML5 ; JavaScript; Animated GIF

Note 1: High resolution creatives may be accepted by some publishers for higher quality images on double-density/retina displays. The accepted file weight for these high resolution creatives will also increase, but should be no more then double the file size noted in these guidelines. Please check with you media provider for accepted file weights. To identify these creatives note 2x in the file name.

Note 2: Full screen is dependent on the device model and may be restricted by status bars or navigations menus of the OS, browser and/or application.

Note 3: The term "Best Practice" as used in these guidelines means the attribute is allowed and is important, but a current lack of testing tools, studies, etc. prevented certain guidelines form being set. See **Release Notes** & **Best Practice** tabs for more information.

Z-Index Guidelines

Z-Index Range	Content Type	Details
< 0	Background Elements	None
0 - 4,999	Main Content, Standard Ads	Standard ad tags in place with regular content. Includes OBA Self Regulation Message (CLEAR Ad Notice)
5,000 - 1,999,999	Expanding Advertising	The entire expandable ad unit should be set within this range
2,000,000 - 2,999,999	Floating Advertising	Over The Page ads (OTP's)
3,000,000 - 3,999,999	Pop-up Elements	Chat windows, message notifications
4,000,000 - 4,999,999	Non-anchored Floating Elements	Survey recruitment panels
5,000,000 - 5,999,999	Expanding Site Navigation Elements	Drop down navigation, site warnings, etc. Only the expanding portion of navigation elements should be included on this level.
6,000,000+	Full-page Overlays	Full-window Over-the-Page (OTP) ads and Between-the-Page ads IF they cover page content

Note: ad designers should consult each publisher individually for their specific Z-index guidelines

Z-index Definition

Enumerated layers of elements and content on a publisher's webpage. Consideration of the z-element in page content design such as navigation, imagery, and ads is important for providing a seamless experience when page content overlaps (i.e. an expanding ad with a z-index that is lower [on the z-index scale] than navigational elements may give the appearance that page navigational elements are showing through the expanded portions of the ad).

Z-Index Range Use Recommendations

The Z-index represents layers of elements on a webpage. When ad elements and other page elements are layered incorrectly, proper display of either page content or ad content (or both) may be compromised. The accidental "collision" of competing elements on a webpage that share the same Z-index value leads to a poor consumer experience, in the form of distorted or mangled images and text. Accordingly, the establishment of an industry accepted z-index hierarchy and associated numerical range is crucial to solving the occurrence of collisions. Please note that adoption of these new Z-index guidelines by all publishers will take time. Creative designers are advised to consult directly with publishers for their individual Z-index guidelines.

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Display Creative Guidelines
Z-Index Guidelines

Mobile Phone Creative Guidelines Release Notes:

Overview:
These Mobile Phone Creative Guidelines are the work-product of an exhaustive cross-industry mobile ad operations working group effort to create commonality for the development of ad units across the mobile phone ecosystem. The IAB Mobile Marketing Center of Excellence joined with the Mobile Marketing Association to develop this update with three overriding goals:

1. Issue guidelines that empower creative shops to exercise the limits of their imagination, only tempering creativity as it relates to positive consumer experience
2. Further simplify the digital mobile supply chain by making these new guidelines easily accessible, adoptable and understandable.
3. Provide cross-platform consistency by aligning these guidelines with the existing Web Display Creative Guidelines where applicable.

While the accommodation of every individual concern is beyond reach, near universal approval of these specifications and guidelines was achieved by the working group participants. Despite a few inevitable compromises, these guidelines represent clarification in a fragmenting mobile ecosystem. These guidelines should empower marketers and their creative shops to develop mobile phone advertising that results in a positive consumer experiences.

Mobile encompasses a wide array of devices including feature phones, smartphones, tablets, and eReaders. In order to narrow the scope of this project and to honor the still early development of advertising on other devices, these guidelines were established for mobile phone ad units only. Guidelines have been provided for both smartphone and feature phone devices and are relevant for both mobile web and in-app. They include static images units as well as rich experience units. Separate guidelines are available for the IAB Mobile Rising Star rich media units designed for both smartphone and tablet devices. (http://www.iab.net/risingstarsmobile). Distinction has not been made by operating system (OS) as the guidelines provided are universal across OS. Differences per OS arise when coding rich experiences.

Some attributes that are included in the display creative guidelines for computers are not widely adopted in the mobile ecosystem, do not have sufficient testing tools available or are closely effected by the constantly evolving mobile marketplace. While agreed that these attributes are important they have been noted as best practice. The working group felt there was not sufficient experience or testing tools available to set guidance at this time. Please refer to more detailed explanations per attributes in these release notes as well as the mobile phone best practices section.

The mobile marketplace is constantly evolving with new device models with faster processing speeds, changes to carrier data plans, upgrades to operating systems, and other innovations. All of these affect the mobile advertising ecosystem and potentially these guidelines. While continual review and updating of these guidelines will be conducted on a regular basis, marketers, creative designers and media agencies are strongly advised to consult directly with publishers in order to obtain their exact creative specifications.

Availability and Adoption
Please be advised that these IAB and MMA guidelines represent an industry recommendation. Accordingly, not all publishers, nor all IAB member companies or MMA member companies, adopt these guidelines without modification relative to their own unique business offering. Marketers, creative designers and media agencies are strongly advised to consult directly with publishers in order to obtain their exact creative specifications.

Ad Unit Dimensions and High Resolution Displays
To provide unified guidelines for the mobile phone marketplace these guidelines were developed by adding additional attributes to the Mobile Marketing Association's Universal Mobile Ad Package units which are being widely adopted by publishers. However, mobile phones with higher resolution displays (double-density or retina displays) are becoming more prevalent in the mobile marketplace. As a result high resolution creative units may be accepted by some publishers. While the dimensions of the placement on the publisher's page stays the same for a high resolution display, the creative should be designed with four times the number of device pixels in order to keep the same physical size. This is done by doubling the placement dimensions. (ex. 300x50 placement and 320x50 placement would accept 600x100px and 640x100px creative sizes respectively). As the creative size increases, so will the file weight. While we highly recommend adhering to the provided file weight guidelines we understand this may be a challenge with high resolution images. It is suggested to keep high resolution ad units less then two times the provided guideline. Marketers, creative designers and media agencies are strongly advised to consult directly with publishers in order to obtain exact creative specifications.

Rich Media Ad Unit Expansion
The mobile phone display guidelines include two rich media units that allow expansion. The dimensions included in these guidelines are the most common expansion size when expanding to a set size. Expanding to full screen is also common practice for handheld device advertising. Screen dimensions vary by mobile phone model. Even when targeting specific phone models the "full page" dimensions may be restricted by status bars or navigation menus of the operating system, browser and/or application. It is recommended to use the noted expansion sizes as safe zones as creative beyond these dimensions may get cut off. Please also see IAB Mobile Rising Start Flex Unit for more guidance on safe zones. (http://www.iab.net/risingstarsmobile#4) For executing expansion the Mobile Rich Media Ad Interface Definitions (MRAID) provides a unified way for the ad creative to get information about screen size, device capabilities, and other details relevant to desired ad behavior when delivering to a publisher that is MRAID compliant. (http://www.iab.net/MRAID) Marketers, creative designers and media agencies are encouraged to consult directly with publishers in order to obtain specific creative specifications.

Balancing File Load Size with Consumer Experience
Balancing the requirements of advertisers and publishers while ensuring that the consumer experience remains positive is a consideration that heavily influenced these guidelines. Mobile phones have an array of data connections (Wi-Fi, 3G, 4G etc.) and plans available which vary from carrier to carrier. Some of these plans result in consumers paying for the amount of data consumed. Mobile device connections can also change as a user change physical location. This changing connectivity combined with the smaller processing power of handheld devices resulted in the decision to keep the Max Initial File Load Size low to ensure a positive user experience.

Max Additional Initial File Load Size for OBA Self-Reg Compliance
The current Self-Regulatory Principles for Online Behavioral Advertising include mobile, but implementation guidelines are still being established. As a result, a specific guideline has not been provided at this time.

Subsequent Max User-Initiated Additional Streaming File Size
User-Initiated streaming file size guideline has been noted as a "best practice" for mobile handheld devices since most devices are tied to limited data plans through their carrier. In addition HTML5 is currently limited to a streaming solution which uses progressive download as the primary delivery method which will increase the ad's weight and impact a user's experience. Until additional research and best practices emerge for video served on handheld devices the recommendation is to optimize the video file to be as small as possible. Marketers, creative designers and media agencies are strongly advised to consult directly with publishers in order to obtain their exact creative specifications.

Z-Index Range
The Z-index represents layers of elements on a webpage. When ad elements and other page elements are layered incorrectly, proper display of either page content or ad content (or both) may be compromised. The accidental "collision" of competing elements on a webpage that share the same Z-index value leads to a poor consumer experience, in the form of distorted or mangled images and text. Accordingly, the establishment of an industry accepted z-index hierarchy and associated numerical range is crucial to solving the occurrence of collisions.

The Z-index ranges used in these guidelines are taken directly from the Z-Index Guidelines that were released in the last update of the Web Display Creative Guidelines in February 2012. Please note the adoption of these Z-index guidelines by all publishers will take time. Creative designers are advised to consult directly with publishers for their individual Z-index guidelines.

While z-index and the avoidance of the accidental "collision" is applicable to mobile web, in-app ad units are delivered within a web-kit window eliminating the possibility of conflict with the app content. Designing ad units running in-app in-line with the suggested z-index ranges will have no negative affect on the unit's performance and is encouraged as it works towards the successful implementation of the ad unit across both mobile experiences.

Max Percentage of CPU Usage
Ads that load faster can help web pages and applications load faster, leading to higher user satisfaction, lower page and app abandonment, and most importantly for agencies and marketers, more brand engagement and increased opportunities for ads to yield higher conversions and tap through rates. Ads that use too much of a consumer's processing power, load slower. Accordingly, limits on the percentage of CPU usage were introduced in the last update to the Web Display Creative Guidelines for computers, but setting such a guideline for the mobile ecosystem is more complicated.

Users' mobile phones are limited in how much processing power is available for loading webpage and application elements as well as ads. The diversity of mobile phones currently in use complicates the identification of a common CPU percentage across the industry. This variability combined with the limited testing tools after development prevents a specific guideline from being set at this time. The group noted that this is a very important attribute and encourage creative designers to optimize their creative accordingly and consult with individual publishers about benchmark testing requirements based on the attributes of their unique audience.

Submission Lead-Time
In order to ensure timely and smooth campaign launches, this guideline is set to allow publishers the minimum time required to test ad creative on their mobile webpages and apps prior to campaigns going live. The varying array of mobile phone models, OS versions, behavior between in-app and mobile web environments as well as app to app are just some of the factors that play in to the need for more time to do quality assurance testing. Time, money and even user engagement can be lost when an ad doesn't display properly at the start of a campaign. Minimum submission lead times recommended in this document are an important step to improving the process for releasing a quality ad experience. Thorough quality assurance testing is important no mater the type of creative or media company you are working with. Custom or more advanced ad units that take advantage of advanced device features or special behavior may require additional time for testing. Advertisers, creative designers and media agencies are strongly advised to consult directly with publishers for their individual submission lead-times.

Supported Creative Types
Prior to the wide adoption of smartphones and tablets, Flash™ formatted creative was widely accepted and easily displayed across the industry. In today's market, adjustments have to be made to accommodate ads across multiple display devices. HTML5 has provided one solution that has become adopted across the mobile ecosystem for rich media units. Static or simple animated units are still accepted in GIF, JPG, and PNG. (Note that animated gifs are not supported by all operating system versions). Ad units developed in Flash™ will not render on all mobile operating systems and have therefore been excluded as a supported creative type.

Constructive Feedback
In developing these guidelines, both the MMA and the IAB and their member companies have made every reasonable attempt to include the perspectives of the entire digital supply chain. We realize however, that not every party involved in this vast ecosystem will have had an opportunity for individual influence. As such, we invite you to provide your constructive feedback. Most importantly, we are interested in hearing directly from the creative designers, creative directors and creative technologists that use these guidelines. Please email constructive feedback and input to mobile@iab.net. When providing your feedback, be sure to mention the exact category name of the guideline(s) for which you are referencing in addition to real-world use-case examples. We'll do our best to consider your input when making future updates to these guidelines. Thank you!

Mobile Phone Creative Best Practice:

When developing an ad unit for a mobile handheld device it is important to know where the ad unit will be delivered and optimized all assets and coding to produce the lightest ad unit possible to ensure a positive user experience. Here a few questions to guide you.

Will the ad unit be displayed in an online or offline experience?
It is important to know if the ad unit will be delivered in an online or offline experience as differences will come into play when determining how to store and call assets. It is recommended to consult with publishers on best practices specific to their applications.

What type of connection will a user be on when interacting with the ad unit?
Mobile phones have an array of data connection possibilities (Wi-Fi, 3G, 4G etc.) and plans that vary from carrier to carrier. Even if you know the type of connection a user has upon initial interaction, it could change as the user changes their physical location. This changing connectivity, combined with the smaller processing power of handheld devices, result in the crucial need to optimize the ad unit to its smallest file weight possible, ensuring faster load times. When applicable, targeting heavy rich media ad units to devices with strong fast connections such as Wi-Fi is recommended. This practice is especially encouraged with longer form video units.

Does everything need to be loaded upfront?
The guidelines note initial and user subsequent file loads, but not all mobile publishers offer a second load experience. Some ad units are served with the entire ad loading upfront, while others may have the ability to call subsequent user initiated load. Polite file load (withholding a portion of the total ad creative file size from loading until publisher content has loaded) which has become prevalent for rich media ad served on computer browsers is not widely available in the mobile ecosystem. No matter how the ad unit is delivered the same processing and bandwidth restrictions exist, so optimizing is still very important.

It is recommended that rich media ad units with multiple panels/pages be loaded progressively when available. Only interactions that are available from the initial panel/page should be loaded at that time. As the user navigates through the ad experience, additional panels and animation may be loaded.

Are the images and animation fully optimized?
All images and animation used should be optimized to produce the lightest total ad unit file weight possible. For example if the same image is used in multiple areas of an ad then it should be cached and re-used. When designing a high resolution ad unit be selective as to what assets need to be high resolution to ensure optimal image quality. It is also important to limit the amount of external calls that are made.

Is the user directed to a mobile optimized experience?
All call to actions should be mobile optimized. For example, when direction to a landing page it should be optimized for the mobile device with simplified navigation, readable content without the need to zoom and touch friendly. Please see IAB's Tap Into Mobile for more guidance on mobile optimized landing pages: http://www.iab.net/tapintomobile

Are all creative files named suitably?
To help with the trafficking process creative files should be named with descriptive characteristics including creative dimensions and 2x for double density/retina creatives.